

DEPARTMENT OF ENVIRONMENTAL QUALITY
PROPOSED ALTERNATIVE MERCURY RULE
9/22/2006

17.8.740 DEFINITIONS For the purposes of this subchapter:

(1) "Alternative mercury emission limit" means a mercury emission limit for a mercury-emitting generating unit, established by the department in a Montana air quality permit issued or modified pursuant to 75-2-211, MCA, in lieu of compliance with [NEW RULE I(1)(a)].

(1) remains the same, but is renumbered (2).

(3) "Commencement of commercial operation" has the meaning of "commence commercial operation" as defined in 40 CFR 60.4102.

(2) through (7) remain the same, but are renumbered (4) through (9).

(10) "Maximum design heat input" has the meaning as defined in 40 CFR 60.4102.

(11) "Mercury" means mercury or mercury compounds in either a gaseous or particulate form.

(12) "Mercury-emitting generating unit" means any emitting unit at a facility for which an air quality permit is required pursuant to 75-2-211 or 75-2-217, MCA, that generates electricity and combusts coal, coal refuse, or a synthetic gas derived from coal and that is defined as an electrical generating unit under 40 CFR 60.24.

(13) "Mercury-emitting generating unit that combusts lignite" means any mercury-emitting generating unit that combusts lignite in an amount equal to or greater than 75% of its total heat input, calculated for the prior calendar year on a calendar year basis.

(8) through (15)(b) remain the same, but are renumbered (14) through (21)(b).

17.8.767 INCORPORATION BY REFERENCE (1) For the purposes of this subchapter, the board hereby adopts and incorporates by reference:

(a) through (c) remain the same.

(d) 40 CFR Part 60, specifying standards of performance for new stationary sources, except for 40 CFR 60.4141-4142;

(e) through (g) remain the same.

(h) 40 CFR Part 75, pertaining to mercury requirements.

(2) through (4) remain the same.

RULE I MERCURY EMISSION STANDARDS FOR MERCURY-EMITTING GENERATING UNITS (1) Except as provided in (2), the owner or operator of a mercury-emitting generating unit shall:

(a) if obtaining a Montana Air Quality Permit pursuant to ARM 17.8.743, install Best Available Control Technology for control of mercury emissions as required by 17.8.752;

(b) except for any period in which another mercury emission limit has been established pursuant to this rule, beginning January 1, 2010, or at commencement of commercial operation, whichever is later, limit mercury emissions from the

mercury-emitting generating unit to an emission rate equal to or less than

- (i) 1.5 pounds of mercury per trillion Btu, calculated as a rolling 12-month average, for mercury-emitting generating units that combust lignite; or

- (ii) 0.9 pounds of mercury per trillion Btu, calculated as a rolling 12-month average, for all other mercury-emitting generating units;

- (c) by January 1, 2009, or 12 months prior to commencement of commercial operation, whichever is later, submit an application to the department for a Montana air quality permit or modification of an existing Montana air quality permit for the mercury-emitting generating unit solely to establish the mercury emission limit from (1)(b) and any necessary operational requirements as a condition of the permit. The owner or operator shall include in the application an analysis of potential mercury control options, including, but not limited to, boiler technology, mercury emission control technology, and any other mercury control practices. The owner or operator shall also include in the application a proposed mercury emission control strategy projected to achieve compliance with the emission limit in (1)(b), that must include, boiler technology, mercury emission control technology, or any other mercury control practices used or anticipated to be used by the owner or operator to achieve compliance with (1)(b). If the department determines that the mercury emission control strategy is projected to achieve compliance with the emission limit in (1)(b), the department shall include the provisions of the mercury control strategy as conditions of the Montana air quality permit; and

- (d) by January 1, 2010, or at commencement of commercial operation, whichever is later, implement the mercury emission control strategy approved pursuant to (1)(c) .

- (e) if more than one mercury-emitting generating unit is located at a facility, the owner or operator may demonstrate compliance with the requirements of (1)(b), an alternative emission limit or a revised alternative emission limit on a facility-wide basis. An owner or operator choosing to demonstrate compliance with this rule on a facility-wide basis shall report the information required in (9) on a facility-wide basis.

(2) If the owner or operator of a mercury-emitting generating unit properly implements the mercury control strategy approved pursuant to (1)(c), and the mercury control strategy fails under normal operation to meet the emission rate required in (1)(b), the owner or operator:

- (a) shall notify the department of the failure to meet the emission rate required in (1)(b) by March 1, 2011, or within 2 months of such failure, whichever is later; and

- (b) may submit an application to the department for a Montana air quality permit or a modification of a Montana air quality permit solely to establish an alternative mercury emission limit. The owner or operator shall file any application for an alternate emission limit by July 1, 2011, or within 6 months of the failure to meet the emission rate required in (1)(b), whichever is later, and shall include as part of the application:

- (i) all mercury emission monitoring data, obtained pursuant to (9), for the mercury-emitting generating unit;

- (ii) a description of the reason(s) for the failure and any corrective action that may be appropriate;

(iii) a certification that the failure occurred during normal operation of the facility and was not caused entirely or in part by start-up, shakedown, or improper implementation of the mercury control strategy approved pursuant to (1)(d); and

(iv) a revised mercury control strategy demonstrating how compliance with (1)(b) is projected to be achieved as soon as reasonably practicable but no later than 2018. The revised mercury control strategy may include, but is not limited to, boiler technology, mercury emission control technology, and any other mercury control practices used or anticipated to be used by the owner or operator to achieve compliance with (1)(b). The revised mercury control strategy must include measurable indicators of progress toward compliance with the emission limit in (1)(b), which may include a plan of increasing levels of mercury control progressing to compliance with (1)(b);

(c) If an application is submitted in accordance with (2)(b), the failure of the owner or operator of the mercury-emitting generating unit to comply with the mercury emission limit in (1)(b) is not a violation of this rule or the permit until the department has issued its final decision on the application.

(3) If the information submitted pursuant to (2)(b) demonstrates that the owner or operator of the mercury-emitting unit cannot reasonably comply with the mercury emission limit in (1)(b), the department may establish an alternative mercury emission limit. The department may establish an alternative mercury emission limit only if the owner or operator of the mercury-emitting unit demonstrates that the revised mercury control strategy constitutes a continual program of mercury control progression able to achieve the mercury emission rate requirement of (1)(b).

If the department establishes an alternative mercury emission limit, the department must include as a condition of the permit a requirement that the owner or operator of the mercury-emitting generating unit make reasonable efforts toward achieving the measurable indicators of progress contained in the revised mercury control strategy.

Failure to make reasonable efforts toward achieving the measurable indicators of progress contained in the revised mercury control strategy is a violation of the permit. The department shall base any alternative mercury emission limit on the best level of emission control achieved or achievable by the revised mercury control strategy and shall consider the information submitted pursuant to (2) when establishing the alternative mercury emission limit.

(4) An alternative mercury emission limit established in a Montana air quality permit:

(a) must not exceed:

(i) 4.8 pounds of mercury per trillion Btu, calculated as a rolling 12-month average, for a mercury-emitting generating unit that combusts lignite and commenced commercial operation prior to October 1, 2006;

(ii) 3.6 pounds of mercury per trillion Btu, calculated as a rolling 12-month average, for a mercury-emitting generating unit that combusts lignite and commenced commercial operation on or after October 1, 2006;

(iii) 2.4 pounds of mercury per trillion Btu, calculated as a rolling 12-month average, for a mercury-emitting generating unit that does not combust lignite and commenced commercial operation prior to October 1, 2006; or

(iv) 1.5 pounds of mercury per trillion Btu, calculated as a rolling 12-month

average, for all other mercury-emitting generating units that do not combust lignite; and

(b) expires January 1, 2018.

(5) The owner or operator of a mercury-emitting generating unit, for which the department has established an alternative mercury emission limit, shall, by January 1, 2014, submit an application to the department for a Montana air quality permit or a modification of a Montana air quality permit for the mercury-emitting generating unit to establish a revised alternative mercury emission. The owner or operator shall submit, as part of any application, the information required in (2)(b)(i) through (iv), a Best Available Control Technology analysis for the control of mercury emissions, a review of the mercury-emitting generating unit's existing alternative mercury emission limit, including associated mercury emission monitoring and operational data, and a revised mercury control strategy..

(6) The department shall establish a revised alternative mercury emission limit in a Montana air quality permit that will become effective beginning January 1, 2018. A revised alternative mercury emission limit must meet the requirements of (3) or constitute Best Available Control Technology, whichever is more stringent, but must not exceed:

(a) 2.8 pounds of mercury per trillion Btu, calculated as a rolling 12-month average, for a mercury-emitting generating unit that combusts lignite; or

(b) 1.2 pounds of mercury per trillion Btu, calculated as a rolling 12-month average, for all other mercury-emitting generating units.

(7) No later than 10 years after issuance of the permit containing the mercury emission limit, and every 10 years thereafter, the owner or operator of a mercury-emitting generating unit, for which the department has established a mercury emission limit under (1)(b) or (6), shall file an application with the department for a Montana air quality permit or a modification of a Montana air quality permit for the mercury-emitting generating unit to establish a revised mercury emission limit. The owner or operator shall submit the information required in (2)(b)(i) through (iv), a Best Available Control Technology analysis for the control of mercury emissions and a review of the mercury-emitting generating unit's existing alternative mercury emission limit and the mercury control strategy, including associated mercury emission monitoring and operational data as part of the application. The department shall establish a revised mercury emission limit in a Montana air quality permit that meets the requirements of (3) or constitutes Best Available Control Technology whichever is more stringent, but that must not exceed:

(a) 2.8 pounds of mercury per trillion Btu, calculated as a rolling 12-month average, for a mercury-emitting generating unit that combusts lignite; or

(b) 1.2 pounds of mercury per trillion Btu, calculated as a rolling 12-month average, for all other mercury-emitting generating units.

(8) The owner or operator of a mercury-emitting generating unit shall comply with the monitoring, recordkeeping, and reporting provisions of 40 CFR Part 75. Any continuous emissions monitors used must be operated in compliance with 40 CFR Part 60, Appendix B.

(9) The owner or operator of any mercury-emitting generating unit shall report to the department within 60 days after the end of each calendar quarter, on

forms as may be prescribed by the department:

(a) the monthly average mercury emission rate, for each month of the quarter; and

(b) the percentage of time the mercury emission monitoring method was operating during the quarter.

(10) If the federal Clean Air Mercury Rule (CAMR), adopted in 70 Fed. Reg. 28606 (May 18, 2005), is declared invalid by a court of competent jurisdiction, the provisions of 40 CFR Part 75 and Part 60 Appendix B amended by CAMR, as they pertain to monitoring, recordkeeping, and reporting of mercury emissions, remain in effect, as incorporated by reference in ARM 17.8.767(1).

NEW RULE II MERCURY ALLOWANCE ALLOCATIONS UNDER CAP AND TRADE BUDGET (1) Except as provided in (4), the department shall submit to EPA mercury allowance allocations as described below.

(a) For mercury-emitting generating units for which commercial operation commenced before October 1, 2006, the department shall submit allowance allocations by November 17, 2006, for the control period years of 2010, 2011, and 2012, and by October 31, 2009, and October 31 of each year thereafter for the fourth control period year after the year of the notification deadline in a format prescribed by EPA and in accordance with (2) and (3).

(b) For mercury-emitting generating units for which commercial operation commences on or after October 1, 2006,

(i) The department shall submit mercury allowance allocations by October 31 of the control period year for which the mercury allowances are allocated.

(ii) Starting with the control period year of 2018, the department shall submit mercury allowance allocations by October 31 of the earliest control period year to be allocated under the schedule set forth in (a) for which the owner(s) or operator(s) of mercury-emitting generating units that have commenced construction as defined in ARM 17.8.801 anticipate to be in commercial operation..

(2) The department shall allocate mercury allowances to the owner or operator of a mercury-emitting generating unit holding a Montana air quality permit on the following basis:

(a) For each control period beginning in 2010 and ending in 2017, mercury allowance allocations for mercury-emitting generating units must be calculated as follows:

(i) 24.0 ounces (equivalent to 1.5 pounds) per Trillion BTU multiplied by the maximum design heat input per year for each Montana mercury-emitting generating unit that combusts lignite; or

(i) 14.4 ounces (equivalent to 0.9 pounds) per Trillion BTU multiplied by the maximum design heat input per year for each Montana mercury-emitting generating unit that does not combust lignite.

(b) For each control period beginning in 2018, mercury allowance allocations for mercury-emitting generating units must be based on an emission rate calculated as follows: 4,768 (298 pound mercury budget in ounces) divided by the sum of the maximum design heat inputs per year in Trillion BTU for each Montana mercury-emitting generating unit in commercial operation for the previous calendar year or that

has submitted a request for mercury allowances under (c) for that control period year. The maximum design heat input per year for each Montana mercury-emitting generating unit must be calculated by multiplying the maximum design heat input in Trillion BTU per hour by 8,760 hours per year. The department shall determine maximum design heat input for each mercury-emitting generating unit based on information reported to it by the owner or operator of the mercury-emitting generating unit.

(c) The owner or operator of a mercury-emitting generating unit that commences commercial operation on or after October 1, 2006 may submit to the department a request to be allocated mercury allowances, starting with the later of the control period in 2010 or the first control period after the control period in which the mercury-emitting generating unit commences commercial operation. A mercury allowance allocation request must be submitted on or before July 1 of the first control period for which the mercury allowances are requested after the date on which the mercury-emitting generating unit commences commercial operation. If commercial operation is anticipated to commence in the control period year of 2018 or later, upon the commencement of construction as defined in ARM 17.8.801, the mercury allowance allocation request must be submitted with a schedule for commencement of commercial operation.

(d) The department may not allocate mercury allowances in excess of the Montana mercury trading budget under 40 CFR §60.4140.

(e) Any allowances left unallocated by the department shall be placed into a general account for the State of Montana as established under 40 CFR 60.4151.

(3) Allocations for a particular control period are limited to those mercury-emitting generating units that were, or are anticipated to be, in commercial operation in the year for which the allocations are being made. Mercury allowance allocations for a partial year, or anticipated partial year, must be prorated. If a request for allowance allocations is submitted upon commencement of construction, based on a schedule for commencement of commercial operation, as defined in ARM 17.8.801, and commercial operation is not commenced as planned, , any unused allowances (based on the date upon which commercial operation commences) for that control period year (or prorated year) must be surrendered to the department. The owner or operator of a mercury emitting generating unit who submits a request for allowance allocation upon commencement of construction, based on a schedule for commencement of commercial operation, shall report to the department the actual date of commencement of commercial operation within 30 days after commencement of commercial operation.

(4) The Department is not required to submit mercury allowance allocations if the Federal Clean Air Mercury Rule (CAMR) adopted in 70 Fed. Reg. 28606 (May 18, 2005) is invalidated by a court of competent jurisdiction.